UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,516	01/18/2002	Takashi Toyofuku	Q67107	7766

7590 12/22/2006	EXAMINER
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC	POON, KING Y
2100 Pennsylvania Avenue, N.W. Suite 800	
Washington, DC 20037-3213	

ART UNIT	PAPER NUMBER
2625	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/22/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/050,516	TOYOFUKU, TAKASHI
	Examiner	Art Unit	
	King Y. Poon	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 October 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) <u>7-20 and 22</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6 and 21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>18 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-6, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lobiondo (US 5,287,194) in view of Fan et al (US 6,310,692).

Regarding claims 1, 25: Lobiondo teaches a system (fig. 1) for forming an image

on a recording medium using a network (column 3, lines 20-25), the system comprising:

a plurality of imaging devices (printer 10, column 3, lines 30-35) each in communication

with the network and operable for forming an image on a recording medium based on

image information received via the network; an imaging indicating device (local stations,

column 3, lines 40-45) in communication with the network, the imaging indicating device

outputting job information including at least image information and output device

designation information via the network for designating a first imaging device included in

the plurality of imaging devices (column 5, lines 15-20); and a plurality of imaging

management devices (the hardware/software of the scheduler 50 that is located in

various local workstations, column 3, lines 40-45, fig. 3) each in communication with the

network (e.g., analyzes printer on the network, column 4, lines 45-50, column 6, lines

10-20) and including program logic (routines, fig. 3) that performs steps comprising

determining whether the first imaging device is not busy (column 5, lines 15-30) and if

so, causing an imaging job for forming an image based on the image information is

automatically executed by the first imaging device (column 7, lines 15-20, column 7,

lines 35-36), and when it is determined that the first imaging device is busy, a second

imaging device of the same kind as the first imaging device is automatically (without

user input) selected (column 5, lines 34-40) from among the plurality of imaging devices

and the imaging job is automatically executed by the second imaging device, wherein

the imaging devices, the imaging indicating device and the imaging management

devices are connected by a network (column 3, lines 15-35).

Lobiondo does not specifically teach detecting whether the printer is operable or

not, although it would have been obvious that when a printer is not operable, the

scheduler would not try to schedule the printer to a non-operable printer.

Fan, in the same area of monitoring the status of a printer, teaches it is well

known in the art to detect whether a printer is operable by a print management system

(column 2, lines 5-20, column 2, lines 35-45).

Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Lobiondo to include: detecting

whether the printer is operable or not such that the scheduler would not schedule a print

job to the disable printer.

Regarding claim 2: Lodiondo teaches wherein the imaging management devices

determine, before the imaging job is executed, whether the first imaging device is

operable (column 4, lines 45-68, teaches the printer is analyzed before the print job is being printed by the printer).

Regarding claim 3: Fan teaches wherein, during execution of the imaging job, the imaging management devices determines whether the first imaging device is operable (column 2, lines 2-20, Fan teaches printer inherently would become disable during printing, and would be detected).

Regarding claim 4: Lobiondo teaches wherein the imaging management devices store and hold performance information of the imaging devices (column 4, lines 1-15), and when it is determined that the first imaging device is not operable, the imaging management devices mutually correct a difference of performance (column 3, lines 64-65, changes the printer form operable to non operable, and a slower printer would become a faster printer because the previously fast printer becomes disable, column 4, lines 50-60) between the first imaging device and the second imaging device, and execute the imaging job with the second imaging device (column 5, lines 15-35).

Regarding claim 5: Lobiondo teaches wherein, during execution of the imaging job by the second imaging device, the imaging management devices determine whether the first imaging device is operable (column 2, lines 2-20, Fan teaches printer inherently would become disable during printing, and would be detected), and when the first imaging device is operable (when the printer become available at 445, during the cycle of fig. 4, the printer would be used again, fig. 4, Lobiondo), the imaging management devices control so that the imaging job is executed again by the first imaging device.

Regarding claim 6: Lobiondo teaches, wherein the imaging management

devices store and hold performance information of the plurality of imaging devices

(column 4, lines 1-15), and when it has been determined that the first imaging device is

operable, the imaging management devices interpolate the difference of performance

between the first imaging device and the second imaging device (column 4, lines 58-

61), and the imaging job is executed by the first imaging device (the fastest printer that

is operable).

3.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Lobiondo (US 5,287,194) in view of Fan et al (US 6,310,692) and Nosaki (US

5,673,373).

Regarding claim 21: Lobiondo teaches a system fig. 1) for printing an image via

a network (column 3, lines 20-30), the system comprising: (a) a plurality of printers (10,

column 3,lines 25-35) comprising different types with some printers being of the same

type, and each printer when in an operable state forming an image according to data

received by the printer from the network; (b) a computer (30, column 3, lines 25-35)

which outputs image and printer designation information to the network for printing an

image in accordance therewith on a printer among the plurality of printers designated in

the information (column 5, lines 15-20); and (c) a printer server (server with a scheduler,

column 3, lines 40-45) which receives the information output from the computer, the

printer server including program logic that when executed performs steps including: (i)

determining via the network whether the printer designated in the information received

from the computer is busy (column 5, lines 15-20; (ii) choosing the designated printer for printing the image if the designated printer is in an operable state; (iii) if the designated printer is not in an operable state, determining via the network if another printer of the same type as the designated printer is in an operable state and if so, choosing the another printer for printing the image (column 5, lines 29-31); and (iv) outputting the data via the network to the chosen printer (column 5, lines 29-31).

Lobiondo does not specifically teach detecting whether the printer is operable or not, although it would have been obvious that when a printer is not operable, the scheduler would not try to schedule the printer to a non-operable printer.

Fan, in the same area of monitoring the status of a printer, teaches it is well known in the art to detect whether a printer is operable by a print management system (column 2, lines 5-20, column 2, lines 35-45).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: detecting whether the printer is operable or not such that the scheduler would not schedule a print job to the disable printer.

Lobiondo also does not teach the server converting information received from the computer to image data in a format suitable for the chosen printer to print the image.

Nosaki, in the same area of printing using a print server, teaches the server converting information received from the computer to image data in a format suitable for the chosen printer to print the image (column 6, lines 8-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: the server converting information received from the computer to image data in a format suitable for the chosen printer to print the image.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Nosaki because: (a) it would have reduced the load of the client computer and would have allowed users with low cost computer to use the system of Lobiondo, (b) a server is a much power computer and would have convert the print data must faster compare to the client computer, and (c) it would have allowed Lobiondo's invention to be used in all situations to increase market share.

4.   Claims 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (US 5,287,194) in view of Fan et al (US 6,310,692) as applied to claim 1 and further in view of Nosaki (US 5,673,373).

Lobiondo also does not teach the server converting information received from the computer to image data in a format suitable for the chosen printer to print the image.

Nosaki, in the same area of printing using a print server, teaches the server converting information received from the computer to image data in a format suitable for the chosen printer to print the image (column 6, lines 8-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: the server

converting information received from the computer to image data in a format suitable for the chosen printer to print the image.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Nosaki because: (a) it would have reduced the load of the client computer and would have allowed users with low cost computer to use the system of Lobiondo, (b) a server is a much power computer and would have convert the print data must faster compare to the client computer, and (c) it would have allowed Lobiondo's invention to be used in all situations to increase market share.

Response to Arguments

5.   Applicant's arguments filed 10/2/2006 have been fully considered but they are not persuasive.

With respect to applicants argument that claims 16, 19, 20 are method claim of elected species of fig. 2, has been considered.

In reply: the limitation of "determining whether a first imaging management device is operable" is not shown in fig. 2. Step 104 of fig. 2 is referring to printer, the imaging devices-not imaging management device.

On the contrary, such limitation is found in step 202 of fig. 4, which is, as request by the applicant in the reply filed on 4/6/2006, not to be prosecuted by the examiner.

With respect to applicant's argument that neither Lobiondo nor Fan teaches automatically selection of second imaging device of the same kind as the first imaging device when the first imaging device is not operable, has been considered.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Lobiondo teaches automatically selection of second imaging device (column 8, lines 14-15, column 5, lines 34-40) of the same kind (type, column 4, lines 50-52) as the first imaging device when the first imaging device is not capable of printing the print job.

Lobiondo does not specifically teach detecting whether the printer is operable or not, although it would have been obvious that an non operable printer is in no way capable of printing the print job of Lobiondo, and the scheduler would not try to schedule the printer to a non-operable printer.

Fan, in the same area of monitoring the status of a printer, teaches it is well known in the art to detect whether a printer is operable by a print management system (column 2, lines 5-20, column 2, lines 35-45).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: detecting whether the printer is operable or not such that the scheduler would not schedule a print job to the disable printer.

With respect to applicant's argument that because user enter a required completion time, the operation is not perform by the scheduler; has been considered.

In reply: the action performed by the scheduler and not by a user, column 5, lines 34-40, is the action that: if a printer is unavailable, can select alternative printer located near the predetermined location. If non are available, the scheduler can select a remote location/printer for printing.

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
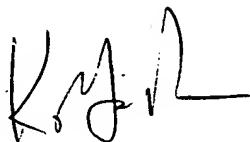

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 11, 2006

KING Y. POON
PRIMARY EXAMINER